

Monoclonal IgM antibody protection in mice against infection with an encapsulated strain of *Staphylococcus epidermidis*.

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Passive protective activities of three different classes of monoclonal antibodies in mice against challenge with strain ATCC 31432 (capsular type I) of *Staphylococcus epidermidis* were examined. Monoclonal IgM antibody passively protected mice against challenge with the homologous strain, whereas monoclonal IgG1 and IgG2b antibodies did not. The protective activity of IgM was absorbed by the cell surface antigen extracted from the homologous strain but not by the antigen from heterologous strains. Rapid reduction of viable cells took place in the peritoneal cavity of mice immunized with monoclonal IgM as early as 6 h after the challenge with the homologous strain. An enzyme-linked immunosorbent inhibition assay showed there was remarkable inhibition with the homologous cell surface antigen but not with heterologous preparations from other strains. Results suggest that in the mouse the major passive protection against the *S. epidermidis* strain is provided by the IgM antibody to the cell surface antigen.

EXHIBIT 1